Welcome ... Good Morning

Gabriela Carvalho and I would be providing a brief description of the Hawaii underground storage tank regulations and an overview of roles and function of the administrative order on consent

First, I would like to start by introducing Ms. Gabriela Carvalho of EPA. She replaced Steven Linder.

In 2015, The Administrative Order on Consent aka AOC was signed by EPA, DOH, Navy and the DLA in response to a release from Tank 5 in 2014. The AOC is an enforceable agreement to ensure that operations at the Red Hill Fuel Bulk storage facility operates in a manner that is safe to human health and the environment. The Scope of Work (SOW) which is part of the AOC has 7 sections which address specific studies, additional work and timelines to determine the safety of current operations and research improvements to prevent future releases.

The Hawaii Administrative rules (HAR) chapter 11-280.1 regulates underground storage tanks, including field constructed tanks like those at the Red Hill facility. The Hawaii rules were amended in 2018 in response to the EPA 2015 update of their regulations (to include the Energy Policy Act requirements). One of the amendments was to introduce additional requirements for FCT and AHS. Such as permitting

The rules define an UST as "any one or combination of tanks (including underground pipe connected thereto) that is used to contain an accumulation of regulated substances, and the volume of which {including the volume of underground pipes connected thereto) is ten percent or more beneath the surface of the ground." (11-280.1-12) the Red Hill Fuel Bulk Facility meets this definition.

The SOW and the rules have 3 areas in common

Tua — The state UST regulations require that FCTs and airport hydrant systems be upgraded to secondary containment or utilized a design which the director determines is protective of human health and the environment by **July 15**, **2038** or close.

Rel detection – state regulations require for the tanks to have release detection

release response - address releases and spills that occur.

CP and metal fatigue - not sure if this is an overlap

Carry over Item

Red Hill inspection -

DOH conducted an inspection late Sept to early Oct 2020. It was a 2 week inspection with a team of 6. It was DOH first inspection at this site.

The inspection of the Red hill facility is not like our typical service station with (3) 10,000 gallon USTs. The red hill facility encompasses (20) 12.5 million gallon field constructed tanks, 4 (400,000 gallon) surge tanks, pump house, the airport hydrant system and 2 product recovery tanks and all the associated pipelines and 5 piers.

We reviewed their maintenance records, tank and line tightness testing reports, repairs, release detection records and alarm records, corrosion report for the pipelines,

Further questions came up after the inspections. We wanted to have a better understanding on how the system works. we consulted with EPA and their sme, spoke with testing companies ...

June this year, DOH requested additional information and clarification. The Navy responded in Aug.

After reviewing the information, we are discussing the findings with our Deputy attorney general

Why is this late?

- The Red Hill Facility that was inspected is not limited to the 18 tanks that are the subject for most of the discussion, but also includes the tanks, piping, and airport hydrant system that run from the PAR pipeline connection to the surge tanks, truck fueling station, the piers, and Hickam's airport hydrant system. The physical inspection itself took two weeks using multiple inspectors.
- The May 6 release and other releases have also stretched existing resources.
- The UST program remains short-staffed. Two UST inspector positions, including the Red Hill Inspector position has been vacant. With hiring freeze and general fund restrictions, we have not been able to date, fill these positions, which has created a resource problem.

STOP HERE - Rest of the pages are my notes.

Airport hydrant systems and UST systems with field-constructed tanks installed on or after July 15, 2018 are already required to have secondary containment [section 11-280.1-20(g)(2)].

Secondary containment is not required for some piping associated with airport hydrant systems and UST systems with field-constructed tanks, regardless of installation date; this remains unchanged [sections 11-280.1-20(g)(2) and 11-280.1-21(b)(2)].

7/8/2021 - Make non-substantive corrections to improve the clarity of existing requirements. • Make edits to ensure that the state regulations are fully consistent with the federal UST regulations. • Clarify notification and reporting requirements.

UDC -allow for visual inspection and access to the components in the containment system or monitoring leaks from the dispense system with a sensing device that signals presence of regulated substance. WAS: requiring both visual and sensor. This make it the same as the federal requirements.

HAR requirement Spill - portable drip containment Overfill CP - pending the results of contested case Rel detection – annual ttt at 0.5 leak rate Doing this semi annual ag 0.5 leak rate Release response suspected Confirmed Closure

Operator training - submitted

Permits - contested case

The tanks are currently subject to §§11-281-12 and 11-281-13 and subchapters 6, 7, and 8 of chapter 11-281, Hawaii Administrative Rules, and the tanks currently meet performance standards for corrosion protection and use a release detection method that is consistent with both the federal and state rules. Red Hill has, and has always had, corrosion protection as that concept is defined in both the federal and state rules because the steel tanks are encased in concrete and are not in contact with the corrosion-causing soil. Additionally, Red Hill utilizes a system of release detection whereby the volume of stored

fuel is routinely measured and inventory is statistically reconciled to detect a possible release. The proposed rules are designed to enhance the performance and protective measures already in place at Red Hill. Field-constructed tanks installed before the effective date of the new regulations (including the USTs at the Red Hill Bulk Fuel Storage Facility) are subject to the following requirements which must be implemented in accordance with the following schedule:

Applicable immediately on effective date of new rules: • Under-dispenser containment for new dispenser systems [§25] • General operating requirements [subchapter 3] Requirements substantially similar to requirements already applicable: • Corrosion protection for tanks and piping [§21(a)(2)(A), §20(b) and (c); current §§11-281-12 and 11-281-13] • Release reporting, investigation, and confirmation [subchapter 5; current chapter 11-281 subchapter 6] • Release response action [subchapter 6; current chapter 11-281 subchapter 7] • Closure [subchapter 7; current chapter 11-281 subchapter 8]

Applicable one year after effective date of new rules: Spill and overfill requirements [§§21(a)(2)(B), 20(d)] • Release detection [subchapter 4] • Financial responsibility [subchapter 8] • Operator training [subchapter 10] • Permits [subchapter 12]

Applicable twenty years after effective date of new rules: • Secondary containment or alternative tank and piping design [§21(c); moved from proposed §21(d)(2)(B)]